

# Claims

- [c1] 1. A method of containment or enclosure that employs one or all of the following substances: porous materials; gels; materials with large surface area; porous particles. And wherein at least one of said substances contains vapor generating chemical(s) or liquid(s) contacting its surface by means of at least one of the following: adsorption; chemisorptions; capillary forces.
- [c2] 2. Containment apparatus that uses method of claim 1.
- [c3] 3. Method of claim 1 used for packaging of items during their transportation by air, sea, or ground.
- [c4] 4. Method of claim 1 that uses two or more distinctive types of said substances.
- [c5] 5. Containment apparatus that employs method of claim 4.
- [c6] 6. Apparatus for long- or short-term containment that does not have power source and maintains high partial vapor pressure at predetermined level above 98%.
- [c7] 7. Containment apparatus that uses power source and maintains relative pressure of vapors at 98% or above

and has a source of saturated or oversaturated vapors.

- [c8] 8. Containment apparatus of the claim 7 that is used for packaging and storage of micro fluidic devices or materials.
- [c9] 9. Containment apparatus of the claim 7 that is used for transportation of items by air, sea, or ground.
- [c10] 10. Apparatus of the claim 6 that is used for transportation of items by air, sea, or ground.
- [c11] 11. Method of the claim 4 used for packaging of items during their transportation by air, sea, or ground.
- [c12] 12. Apparatus that controls vapor pressure near saturation level and uses meniscuses curvatures and temperature of fluid to adjust said pressure.
- [c13] 13. Use of the apparatus of claim 12 as a part of enclosure for MEMS device.